

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification o (Form PCT/ISA/2	f Transmittal of International Search Report 20) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/CU 01/00003	07/06/2001	07/06/2000
Applicant		
CENTRO NACIONAL DE INVEST	IGACIONES CIENTIFICAS	
This International Search Report has been according to Article 18 A copy is being tra	n prepared by this International Searching Auth ansmitted to the International Bureau.	ority and is transmitted to the applicant
This International Search Report consists $oxed{X}$ It is also accompanied by	of a total of3 sheets. a copy of each prior art document cited in this	report.
Basis of the report		
a. With regard to the <b>language</b> , the language in which it was filed, unl	international search was carried out on the bas ess otherwise indicated under this item.	is of the international application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a translation of th	ne international application furnished to this
b. With regard to any <b>nucleotide an</b> was carried out on the basis of the		ternational application, the international search
<u> </u>	rnational application in computer readable form	٦.
furnished subsequently to	this Authority in written form.	
furnished subsequently to	this Authority in computer readble form.	
	osequently furnished written sequence listing do s filed has been furnished.	pes not go beyond the disclosure in the
the statement that the info furnished	ormation recorded in computer readable form is	identical to the written sequence listing has been
2. Certain claims were fou	nd unsearchable (See Box I).	
3. Unity of invention is lac	king (see Box II).	
4. With regard to the <b>title</b> ,		
the text is approved as su	bmitted by the applicant.	
the tert has been establis	hed by this Authority to read as follows:	
5. With regard to the <b>abstract</b> ,	to the the sheet and Feet A	
	iomitted by the applicant. Thed, according to Rule 38.2(b), by this Authorit adate of mailing of this international search rep	
6. The figure of the <b>drawings</b> to be publ	ished with the abstract is Figure No.	1
as suggested by the appli	icant.	None of the figures.
because the applicant fail	ed to suggest a figure.	<del>.</del> .
because this figure better	characterizes the invention.	

International Application No 01/00003

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N27/447 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched} & \text{(classification system followed by classification symbols)} \\ IPC & 7 & G01N & C12Q & B01D \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

Citation of document, with indication, where appropriate, of the relevant passages		
Citation of document, with indication, where appropriate, or the relevant passages	Relevant to claim No.	
EP 0 745 844 A (CENT NAC INVESTIG SCIENT) 4 December 1996 (1996-12-04) the whole document	1,19,21, 22,34,37	
ES 2 147 174 A (THE BOARD OF TRUSTEES OF THE LELAND STRANFORD JUNIOR UNIVERSITY) 1 September 2000 (2000-09-01) the whole document	1-5,19, 22-26, 34,39,43	
US 5 084 157 A (CLARK STEVEN M ET AL) 28 January 1992 (1992-01-28) the whole document	1-5,19, 22-26, 34,39,43	
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	4 December 1996 (1996-12-04) the whole document  ES 2 147 174 A (THE BOARD OF TRUSTEES OF THE LELAND STRANFORD JUNIOR UNIVERSITY) 1 September 2000 (2000-09-01) the whole document  US 5 084 157 A (CLARK STEVEN M ET AL) 28 January 1992 (1992-01-28) the whole document	

X Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.		
"A" document defining the general state of the lart which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "2" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "C" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "C" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "S" document member of the same patent family		
Date of the actual completion of the international search	Date of mailing of the international search report		
26 September 2001	2 3 10 2001		
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	Authorized officer  Antonio Cardenas		
Fax: (+31-70) 340-3016	AILLOTTO Cardenas		

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International Application No PC 01/00003

ation) DOCUMENTS CONSIDERED BE RELEVANT	
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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WO 01 07150 A (KAHL ET AL ) 1 February 2001 (2001-02-01) page 2, line 27 - line 31; claims	1,22,34
US 6 063 250 A (BECKER ROBERT G) 16 May 2000 (2000-05-16) figures	1,22
GB 2 249 395 A (BIO RAD LABORATORIES) 6 May 1992 (1992-05-06) page 5, line 14 -page 9, line 32	1,22,34, 43
	US 4 740 283 A (LAAS WILLIAM A ET AL) 26 April 1988 (1988-04-26)  the whole document  WO 01 07150 A (KAHL ET AL) 1 February 2001 (2001-02-01) page 2, line 27 - line 31; claims  US 6 063 250 A (BECKER ROBERT G) 16 May 2000 (2000-05-16) figures  GB 2 249 395 A (BIO RAD LABORATORIES) 6 May 1992 (1992-05-06)

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Information on patent family members

International Application No
PC 01/00003

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0745844	Α	04-12-1996	EP	0745844 A2	04-12-1996
ES 2147174	Α		NONE		
US 5084157	Α	28-01-1992	NONE		
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#### A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N27/447 C12Q1768

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched} & \text{(classification system followed by classification symbols)} \\ \text{IPC 7} & \text{G01N} & \text{C12Q} & \text{B01D} \\ \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
А	EP 0 745 844 A (CENT NAC INVESTIG SCIENT) 4 December 1996 (1996-12-04) the whole document	1,19,21, 22,34,37	
P,A	ES 2 147 174 A (THE BOARD OF TRUSTEES OF THE LELAND STRANFORD JUNIOR UNIVERSITY) 1 September 2000 (2000-09-01) the whole document	1-5,19, 22-26, 34,39,43	
A	US 5 084 157 A (CLARK STEVEN M ET AL) 28 January 1992 (1992-01-28) the whole document	1-5,19, 22-26, 34,39,43	
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	er documents are listed in the continuation of box C.  Y Patent family members		

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X Further documents are listed in the continuation of box 0.	Patent family members are listed in annex.		
"Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed	iater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention.  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.		
Date of the actual completion of the international search  26 September 2001	Date of mailing of the international search report  2 3 10 2001		
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer Antonio Cardenas		

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oplication No

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C.(Continu	ation) DOCUMENTS CONSIDERED T	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 740 283 A (LAAS WILLIAM A ET AL) 26 April 1988 (1988-04-26)	1,6,7,- 9-22,27, 28,34, 37, 40-42,44
	the whole document	, , , , , , , , , , , , , , , , , , , ,
Р,А	WO 01 07150 A (KAHL ET AL ) 1 February 2001 (2001-02-01) page 2, line 27 - line 31; claims	1,22,34
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Según la clasificación internacional de patentes (CIP) o según la clasificación nacional y la CIP

#### B. SECTORES COMPRENDIDOS POR LA BUSQUEDA

Documentación mínima consultada (sistema de clasificación seguido de los símbolos de clasificación ) CIP 7 G01N C12Q B01D

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Otra documentación consultada además de la documentación mínima en la medida en que tales documentos forman parte de los sectores comprendidos por la búsqueda

Base de datos electrónica consultada durante la búsqueda internacional (nombre de la base de datos, y cuando sea aplicable, términos de búsqueda utilizados)

Categoría°	Identificación del documento, con indicación, cuando se adecuado, de los pasajes pertinentes	N° de las reivindicaciones pertinentes
A	EP 0 745 844 A (CENT NAC INVESTIG SCIENT) 4 Diciembre 1996 (1996-12-04) el documento completo	1,19,21, 22,34,37
P,A	ES 2 147 174 A (THE BOARD OF TRUSTEES OF THE LELAND STRANFORD JUNIOR UNIVERSITY) 1 Septiembre 2000 (2000-09-01) el documento completo	1-5,19, 22-26, 34,39,43
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A patential.		
"T" documento ulterior publicado con posterioridad a la fecha de presentatión internacional o de prioridad y que no está en conflicto con la solicitud, pero que se cita para comprender el principio o la teoría que constituye la base de la invención documento de particular importancia; la invención reivindicada no puede considerarse nueva o no puede considerarse que implique actividad inventiva cuando se considera el documento aisladamente "Y" documento de especial importancia; no puede considerarse que la invención reinvindicada implique actividad inventiva cuando el documento esté combinado con otro u otros documentos, cuya combinación sea evidente para un experto en la materia		
Fecha de expedición del presente informe de búsqueda internacional		
<b>2</b> 3. 10. 20 <b>0</b> 1		
Funcionario autorizado		
Antonio Cardenas		

	ción) DOCUMENTOS CONSIDE S PERTINENTES	
Categoría°	dentificación de los documentos citados, con indicación, cuando se adecuado, de los pasajes pertinentes	N° de las reivindicacione pertinentes
A	US <b>4 740 283 A (L</b> AAS WILLIAM A ET AL). 26 Abril 1988 (1988-04-26)	1,6,7, 9-22,27, 28,34, 37, 40-42,44
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